#### Warren M. Wilson

Department of Anthropology and Archaeology
University of Calgary
2500 University Drive N.W.
Calgary, Alberta T2N 1N4
E-mail: wwilson@ucalgary.ca

Web: <a href="http://bioanth.ucalgary.ca/Wilson">http://bioanth.ucalgary.ca/Wilson</a>

#### **Research Interests:**

Human population biology and biocultural medical anthropology with an emphasis on human adaptation, health, and nutrition of women and children in Nicaragua and Tanzania, Guyana's rainforests, and among refugees in Canada.

#### **Positions Held:**

2004-present	Associate Professor, Department of Archaeology, University of Calgary Adjunct Associate Professor, Department of Community Health Sciences Director, Graduate Specialization in Biological Anthropology
2017-present	Member, Alberta Children's Hosptial Research Institute
1999-2004	Assistant Professor, Department of Archaeology, University of Calgary
1997-1999	Sessional, Department of Anthropology, University of Colorado at Boulder
1999	Sessional, Department of Anthropology, University of Colorado at Denver
1995	Sessional, Department of Anthropology, Colorado State University

### **Education:**

Ph.D.	University of Colorado at Boulder (1993-1997), Biological Anthropology
	Dissertation Advisor: Dr. Darna L. Dufour.

M.A. University of Colorado at Boulder (1991-1993), Biological Anthropology Thesis Advisor: Dr. Darna L. Dufour

B.A. Washington and Lee University, (1981-1985) Lexington, Virginia

### **Current Projects:**

Maternal and Child Health and the Architecture of Daily Life among Rural Nicaraguans: A Biocultural Investigation of Maternal-Child Health in Northern Nicaragua: designed to advance our understanding of maternal and child health by investigating the effects of resource stress, social capital, and food security on an integrated measure of

physiological status, allostatic load, based on markers collected in a sample of mothers and children in rural Nicaragua. Initiated in 2014. (PI: **W. Wilson,** Co-investigators: B. Piperata, Ohio State U., K. Schmeer, Ohio State U., J. DeCaro, U. Alabama; Comunidad Connect, Nicaragua)

<u>Maternal Mental Health and Child Well-Being in Northwest Tanzania</u>: Study of the relationship between food insecurity, maternal stress, and child health in and around Mwanza, Tanzania. Initiated in 2010. (Co-PIs: **W. Wilson** & J. DeCaro, U. Alabama)

### **Past Projects:**

From knowledge to practice: vitamin D and new Canadian mothers and children: Study of the dietary practices of recent immigrants in Canada to assess variables which influence Vitamin D intake. 2008-2010. (PI: T. Moffat, U. McMaster)

<u>FaceBase</u>: Study of the relationship between nutritional status, genes, and facial morphology among Tanzanian children and adolescents. 2011-2015. (PI's: B. Hallgrimsson, U. Calgary, and R. Spritz, U. Colorado)

<u>Culture change and health among the Makushi</u>: Study of the impact of rapid culture change on the well-being of Makushi Amerindians in 13 villages in central Guyana. 1999-2007. (PI: **W. Wilson**)

Agricultural practices of the Tatuyo of the Colombia Amazon: Study of the dietary practices of Indigenous Amazonians with a focus on the cultivation of toxic varieties of manioc. 1993-1997. (PI: **W. Wilson**, Collaborator: International Centre for Tropical Agriculture, Palmira, Colombia).

The impact of parasitic infection the growth and work capacity of Colombian boys: Study of the relationship between parasitic infection and child growth and VO2max. 1991-1992 (PI's: Darna Dufour, U. Colorado, Gerald Spurr, U. Milwaukee, Mario Barac-Nieto, U. del Valle, Colombia).

#### **Contracts & Grants**

- 2017 CIHR Planning and Dissemination grant. Maternal and Child Health and the Architecture of Daily Life among Rural Nicaraguans. PI: **W. Wilson**. (\$10,549).
- Institute for Population Research Seed Grant. Ohio State University: Predictors of Allostatic Load in Mothers and Children: Biological Evidence from a High-Stress Setting. PI: Kammi Schmeer & Co-Investigators: B. Piperata (Ohio State U.), J. DeCaro (U. Alabama), W. Wilson (\$30,000 US).
- 2014 University of Calgary Seed Grant: Maternal and Child Health in Nicaragua (\$13,922).
- 2013 University International Grants Committee. Capacity sharing in Tanzania: Training Tanzanian medical and public health students to document and interpret patterns of undernutrition (\$12,378).

2008	SSHRC Research Development Initiative. From knowledge to practice: Vitamin D and new Canadian mothers and children." PI: C. Moffat (McMaster U.), Co-applicants: <b>W. Wilson</b> , D. Sellen, and E. Parra. (\$39,422).			
2007	University of Calgary Research Grant. Support for the 35 <sup>th</sup> Annual meeting of the Canadian Association for Physical Anthropology. PI: MA Katzenberg (U. Calgary), Coapplicant: <b>W. Wilson</b> (\$2,000).			
2007	Faculty of Social Science Research Support, Culture change and health among the Makushi of Guyana (\$2,500).			
2007	Department of Archaeology Carter Grant. Culture change and health among the Makushi of Guyana (\$500).			
2006	SSHRC Strategic Research Cluster. Children and Childhood in Human Societies Cluster. PI: S Saunders (McMaster U.). Co-applicant: <b>W. Wilson</b> was 1 of 7 co-applicants.			
2005	URGC Short-Term Project Application, Culture change and health among the Makushi of Guyana (\$6,000).			
2002 – 2003	Wenner-Gren Foundation for Anthropological Research, fieldwork in Guyana (\$8960).			
2000	University of Calgary Start-Up Grant (No. 75 4278), fieldwork in Guyana (\$10,000).			
1994 – 1995	National Science Foundation Dissertation Improvement Grant, fieldwork in Colombia (\$19,200).			
1993 – 1995	Wenner-Gren Foundation for Anthropological Research, Pre-doctoral Research Grant, dissertation fieldwork in Colombia (\$13,043).			
1993 – 1994	University of Colorado Dean's Small Grant, dissertation fieldwork in Colombia (\$928).			
Awards:				
2001	Faculty of Social Sciences Distinguished Teacher Award			
1993 – 1994	Fulbright Foundation Fellowship, dissertation fieldwork in Colombia.			
1995	Edward E. Hunt Award for Best Student Paper, Human Biology Association annual meetings. Oakland, CA, March 28.			
Articles _ Refereed:				

# **Articles – Refereed:**

In Press

Cole JB, MF Manyama, D Nikitovic, PN Gonzalez, DK Liberton, **W Wilson**, C Rolian, JR Larson, E Kimwaga, J Mathayo, CC Roseman, SA Santorico, K Lukowiak, RA Spritz, B Hallgrimsson. Facial Shape Manifestations of Growth Faltering in Tanzanian Children. <u>Journal of Anatomy</u>.

- Dufour DL, BA Piperata, RSS Murrieta, **Wilson W,** Williams DD. Amazonian foods and implications for human biology. <u>Annals of Human Biology</u>. 43(4):330-348. doi.org/10.1080/03014460.2016.1196245.
- DeCaro JD, M Manyama, **Wilson W** Household-level Predictors of Maternal/Caretaker Depressive Symptoms and Systemic Inflammation Among Infants in Mwanza, Tanzania. <u>American Journal of Human Biology</u>. 28(4):461-470. http://dx.doi.org/10.1002/ajhb.22807.
- 2015 Moffat T, Sellen D, **Wilson W**, Anderson L, Chadwick S, Amarra S. Comparison of Infant Vitamin D Supplement Use Among Canadian-Born, Immigrant, and Refugee Mothers. <u>Journal of Transcultural Nursing</u> 26(3):261-9.
- Vercellotti G, Piperata B, Agnew A, **Wilson W**, Dufour D, Boano R, Justus H, Larsen C, Stout S, Sciulli PW. Exploring the Multidimensionality of Stature Variation in the Past through Comparisons of Archaeological and Living Populations. <u>American Journal of Physical Anthropology</u> 155(2):229-242, DOI: 10.1002/ajpa.22552.
- Wilson W., Bulkan J., Piperata B.A., Hicks K., Ehlers P. Nutritional status of Makushi Amerindian Children and Adolescents of Guyana. <u>Annals of Human Biology</u>. 38(5):615-629, doi:10.3109/03014460.2011.588248.
- Wilson W. and Dufour, D.L. Ethnobotanical evidence for cultivar slection among the Tukanoans: Manioc (Manihot esculenta Crantz) in the Northwest Amazon. <u>Culture and Agriculture</u>. 28(2):122-130.
- Wilson W.; Milner, J.; Bulkan, J.; and Ehlers, P. Weaning Practices of the Makushi of Guyana and their Relationship to Infant and Child Mortality: A Preliminary Assessment of International Recommendations. <u>American Journal of Human Biology</u> 18(3):312-324.
- Wilson W. Cassava (*Manihot esculenta* Crantz), cyanogenic potential, and predation in Northwestern Amazonia: the Tukanoan perspective <u>Human Ecology</u> 31(3): 403 416.
- Wilson W. Soils Used for Gardens by Tukanoans in Northwestern Amazonia and their Impact on Cassava (*Manihot esculenta* Crantz) Cultivar selection. <u>Culture and Agriculture</u> 24(2): 20 30.
- Castro F; Silva-Forsberg MC; **Wilson W**.; Brondizio, E. & Moran, E. The use of remotely-sensed data rapid rural assessment. <u>Field Methods</u> 14(3)243 269.
- Wilson, W. and Dufour, D.L. Why bitter cassava? Productivity of bitter and sweet cassava in a Tukanoan Indian settlement in the Northwest Amazon. <u>Journal of Economic Botany</u> 56(1): 49-57
- Wilson, W.; O'Brien, G.M.; and Dufour, D.L. Application of a picrate semi-quantitative screening assay for the cyanogenic potential of cassava roots at a remote field site.

  Journal of the Science of Food and Agriculture 80: 590-594

Wilson, W.; Dufour, D.L.; Staten, L.K.; Barac-Nieto, M.; Reina, J.C.; Spurr, G.B. Gastrointestinal parasitic infection, nutritional status and physical work capacity in Colombian boys. American Journal of Human Biology 11(6): 763-771

### **Editor Reviewed, Invited Publications**

- In Press Wilson, W. Anthropometry. In <u>The International Encyclopedia of Biological</u> Anthropology, W Trevathan, editor. John Wiley and Sons, Inc.
- Wilson, W., Dufour D.L. Reliance upon a toxic staple crop: an anthropological consideration of the Tukanoan Amerindian cultivation of manioc (*Manihot esculenta* Crantz ssp. *esculenta*) in Northwestern Amazonia. In <u>The Oxford Handbook of the Archaeology of Diet</u>, J Lee-Thorp and MA Katzenberg, editors. Oxford University Press.
- Wilson, W. Long Truck Ride. In <u>Disasters in the Field: Preparing for and Coping with Unexpected Events</u> G Ice, D Dufour, N Stevens, editors. Rowman & Littlefield Publishers. Lanham, MD.
- de Castro F., Silva-Forsberg M.C., **Wilson W.**, Brondizio E.S., Moran E.F. Uso de senoriamento remoto em Levantamento Rapido Rural: uma experiencia na Colombia. In <u>Geoinformacao e Monitoramenta Ambiental na America Latina</u>. M. Batistella and E.F. Moran, editors. Editora Senac, Sao Paulo, Brazil. Pp. 215-248.
- Wilson, W. Game. In: <u>Encyclopedia of Food and Culture.</u> SH Katz, editor in chief. Charles Scribner's Sons, Vol. 2, pp. 93-96.
- Dufour, D.L., **Wilson, W.** La douceur de l'amertume: une ré-évaluation des choix du manioc amer par les Indiens Tukano d' Amazonie. In: <u>l'Alimentation en Forêt</u>

  <u>Tropicale: Interactions Bioculturelles et Perspectives au Développement.</u> C.M Hladik, A. Hladik, H. Pagezy, O.F. Linares, G.J.A. Koppert, and A. Froment, editors. pp. 875-896. Paris, UNESCO/Parthenon Press.
- Dufour, D.L. **Wilson, W.** Characteristics of "wild" plant foods in Amazonia. In: <u>Eating on the Wild Side</u>: <u>The Pharmacological, Ecologic, and Social Implications of Using Noncultigens.</u> N. Etkin, editor. pp. 114-142. Tucson, University of Arizona Press.

#### **Published Abstracts:**

- GE Brown, NC Hoehn, J DeCaro, BA Piperata, KK Schmeer, **W Wilson**. Linking growth and gut function: environmental enteropathy in children under 2 years in rural Nicaragua. *American Journal of Human Biology* 29:31.
- Mannion CA, N Hasanova, MJ Kim, S Premji, NJ Moules, **W Wilson**. The Practice of PICA during pregnancy. Journal of Pediatric and Neonatal Individualized Medicine 6(1):e060110. doi: 10.7363/060110.
- DeCaro JA, AF Dorsey, M Manyama, W Wilson. Cytomegalovirus antibody titers

- among young children in Mwanza, Tanzania: interpretation and relationship to household conditions. *American Journal of Human Biology* 28:274.
- Hoehn N, A Nagel, T Moffat, J Bulkan, Makushi Research Unit, **W Wilson**. Dietary diversity among the Makushi of Guyana. *American Journal of Human Biology* 27:270.
- 2014. Nagel, A, Moffat T, Bulkan J, **Wilson W**. Dietary diversity scores to assess dietary quality among Guyanese Makushi Amerindians. *American Journal of Human Biology* 26:274.
- 2014. Vercellotti G, **Wilson W,** Piperata BA. An analysis of body proportions of adult Makushi Amerindians of Guyana: Sex differences, growth retardation, and distinct female morphotypes. *American Journal of Human Biology* 26:285.
- 2014. Liberton DK, Manyama M, Larson JR, Nagel, A, **Wilson W**, Spritz RA, Hallgrimsson B. Socio-environmental influences on growth in a sample of Tanzanian children. American Journal of Physical Anthropology. *American Journal of Physical Anthropology* 153(S58):170
- DeCaro JA, **Wilson W**, Manyama M, Hallgrimsson B. 2013. Pathways toward differential maternal and child well-being amidst food insecurity in Tanzanian households: the role of child age and maternal affect. *American Journal of Human Biology* 25:255-256.
- Wilson W., DeCaro JA. Defining, operationalizing, and assessing the relationship between stress and health in contemporary Tanzanian mothers and children. *American Journal of Physical Anthropology* S52:293.
- Wilson W. and Bulkan J. Sex differences in linear-growth faltering among the Makushi Amerindians of Guyana: female buffering or preferential treatment of daughters? American Journal of Human Biology 21:274–275.
- Barr E.K. and **Wilson W.** Growth among Makushi Amerindians and non-indigenous peoples in central Guyana: Possible evidence for a genetic explanation for variation in stature. *American Journal of Human Biology* 19(2):248.
- Palmer P. and **Wilson W**. Diet and Growth of Makushi Amerindian Children of Guyana. *American Journal of Human Biology*. 19(2):272
- Wilson, W., Milner, J., Bulkan, J. Duration of exclusive breastfeeding and its relationship to childhood mortality among the Makushi Amerindians of Guyana. *American Journal of Physical Anthropology* 129(Supplement 42):189.
- Wilson, W. and Bulkan, J. Anthropometric indices of nutritional status in Guyanese Makushi Amerindians. *American Journal of Human Biology* 16(2):229.
- Wilson, W., Piperata, B., Forte, J. Birth Order and Growth Among Makushi Indians of Guyana. *American Journal of Human Biology* 13(1):145-146.

- Wilson, W. and Dufour, D.L. Selection for a toxic staple crop: meeting nutritional requirements in a blackwater basin of Northwest Amazonia. *American Journal of Physical Anthropology* Supplement 28:279.
- Wilson, W., Sander, J., and Dufour, D.L. Accuracy of a short-term recall survey in the estimation of total energy expenditure. *American Journal of Human Biology* 8(1):134.
- Dufour, D.L., Haught, T.A., and **Wilson, W.** Rethinking laboratory based instruction in biological anthropology: human variation and microevolution. *American Journal of Physical Anthropology*. Supplement 22:100.
- Wilson, W., Staten, L.K., Dufour, D.L., Barac-Nieto, M., Reina, J.C., Spurr, G.B. Parasitic infection and nutritional status in Colombian boys. *American Journal of Human Biology* 7(1):137.
- Wilson, W. and VanGerven, D.P. An analysis of the relationship between percent cortical area and other indicators of stress. *American Journal of Physical Anthropology* Supplement 18:208-209.

# Meetings and Symposia:

- 2017 Symposium Co-Chair, "Knowledge Translation in Anthropological Health Research: Odysseys from Evidence to Effect." 45th Annual Meeting of the Canadian Association for Physical Anthropology. Edmonton. October.
- 2014 Chair, Local Organizing Committee of the 39<sup>th</sup> Annual Meetings of the Human Biology Association, Calgary. April.
- 2009 Co-organizer of Vitamin D Network Workshop, University of Toronto Mississauga. February.
- 2007 Co-organizer and Chair of the 35<sup>th</sup> Annual Meetings of the Canadian Association of Physical Anthropologists, Banff, Alberta. November.
- Organizer and Chair of the conference *Tropical Rainforests: A Disappearing Treasure*, Denver Museum of Natural History, July.

### **Presented Papers and Posters at Professional Meetings:**

- Wilson W, N Hoehn. Pitfalls and lessons learned in the translation of human biology research. 45th Annual Meeting of the Canadian Association for Physical Anthropology. Edmonton. October.
- GE Brown, NC Hoehn, J DeCaro, BA Piperata, KK Schmeer, **W Wilson**. Linking growth and gut function: environmental enteropathy in children under 2 years in rural Nicaragua. Paper presented at the Annual Meeting of the American Association of Human Biologists. New Orleans, April.

- Mannion CA, N Hasanova, MJ Kim, S Premji, NJ Moules, **W Wilson**. The Practice of PICA during pregnancy. Paper presented at the Annual meetings of the Union of European Neonatal and Perinatal Societies. Valencia, Spain, November.
- Mannion C, N Hasanova, MJ Kim, S Premji, N Moules, **W Wilson**. Pica. Poster presentation at the 9th International Conference on Neonatology and Perinatology, Valencia, November.
- DeCaro JA, AF Dorsey, M Manyama, **W Wilson**. Cytomegalovirus antibody titers among young children in Mwanza, Tanzania: interpretation and relationship to household conditions. Poster presented at the 41<sup>st</sup> Annual Meeting of The Human Biology Association, Atlanta, April.
- Brown G, N Hoehn, BA Piperata, KK Schmeer, **W Wilson**. The challenges of defining and operationalizing "health" in different cultural contexts. Poster presented at the Society for Applied Anthropology, 76<sup>th</sup> Annual Meeting, Vancouver, BC, March.
- Mannion C, N Hasanova, MJ Kim, S Premji, N Moules, **W Wilson**. Practice of Pica during pregnancy of Immigrant Women. Poster Presentation at the Canadian National Perinatal Research Meeting, Banff, AB, February.
- Mannion C, N Hasanova, MJ Kim, S Premji, N Moules, **W Wilson**. Mix it up: Phenomenology and Social Media. Paper presented at the International Institute for Qualitative Health Research (QHR), Kelowna, BC. October.
- 2016 Rudkoski A, G Brown, N Hoehn, BA Piperata, KK Schmeer, **W Wilson**. Maternal mental health and child health in rural Nicaragua. Poster presented at the Society for Applied Anthropology, 76<sup>th</sup> Annual Meeting, Vancouver, BC, March.
- Wilson W, KK Schmeer, G Brown, N Hoehn, B Szabo, S Campanella, BA Piperata. Social capital, maternal mental health, and child health: a cross-sectional survey of mothers and their children in rural Nicaragua. Paper presented at the 43rd annual meeting of the Canadian Association for Physical Anthropology. Winnipeg, October.
- Hoehn N, A Nagel, T Moffat, J Bulkan, Makushi Research Unit, **W Wilson**. Dietary diversity among the Makushi of Guyana. Poster presented at the 40<sup>th</sup> Annual Meeting of The Human Biology Association, St. Louis, April.
- Nagel, A, Moffat T, Bulkan J, **Wilson W**. Dietary diversity scores to assess dietary quality among Guyanese Makushi Amerindians. Poster presented at the 39<sup>th</sup> Annual Meeting of The Human Biology Association, Calgary, April.
- 2014 Mannion C, N Hasanova, MJ Kim, S Premji, N Moules, **W Wilson**. The investigation of Pica behaviour among immigrant women during pregnancy. Paper presented at the Margaret Scott Wright Conference, Edmonton, AB, November.
- Vercellotti G, **Wilson W**, Piperata BA. An analysis of body proportions of adult Makushi Amerindians of Guyana: Sex differences, growth retardation, and distinct female morphotypes. Poster presented at the 39<sup>th</sup> Annual Meeting of The Human Biology

Association, Calgary, April.

- 2014. Liberton DK, Manyama M, Larson JR, Nagel, A, **Wilson W**, Spritz RA, Hallgrimsson B. Socio-environmental influences on growth in a sample of Tanzanian children. Poster presented at the 83<sup>rd</sup> annual meeting of the American Association of Physical Anthropology. Calgary, April.
- DeCaro, J., **Wilson, W.** Untangling the Knot of Correlated Adversities: Food Insecurity, Maternal Depression, and Maternal & Child Health in Mwanza, Tanzania. Paper presented at the 112<sup>th</sup> annual meeting of the American Anthropological Association, Chicago, November.
- Wilson, W., DeCaro, J., Manyama, M., Hallgrimsson, B. Maternal mental health as a mediator of the impact food insecurity on child health in a peri-urban region of Tanzania. Paper presented at the 41<sup>st</sup> annual meeting of the Canadian Association for Physical Anthropology. Toronto, October.
- Wilson, W., DeCaro, J. Defining, operationalizing, and assessing the relationship between stress and health in contemporary Tanzanian mothers and children. Invited paper for the symposium "Reconciling 'stress' and 'health': What can bioarchaeologists learn from the other sub-disciplines." Paper presented at the 82<sup>nd</sup> annual meeting of the American Association of Physical Anthropology. Knoxville, April.
- DeCaro, J., **Wilson, W.**, Manyama, M., Hallgrimsson, B. Pathways toward differential maternal and child well-being amidst food insecurity in Tanzanian households: the role of child age and maternal affect. Paper presented at the 38<sup>th</sup> Annual Meeting of The Human Biology Association, Knoxville, April.
- Wilson, W., Moffat, T., Bulkan, J., Taghvai, B., Makushi Research Unit. Dietary diversity scores to assess dietary quality among Guyanese Makushi Amerindians. Paper presented at the 40<sup>th</sup> Annual Meeting of the Canadian Association for Physical Anthropology. Victoria, BC. November.
- DeCaro, J., **Wilson, W.,** Manyama, M., Hallgrimsson, B., Thomas, M., Taghvai, B., Riley, B., and Carroll, G. Food Insecurity, Maternal Mental Health, and Immune System Function in Mwanza, Tanzania: Pathways toward Differential Child Wellbeing. Paper presented at the Society for Applied Anthropology, 72<sup>nd</sup> Annual Meeting, Baltimore, March.
- Wilson, W., Bulkan, J., Piperata, B., Hicks, K. Secular trends in growth among adult Makushi Amerindians of Guyana. Paper presented at the 38<sup>th</sup> Annual Meeting of the Canadian Association for Physical Anthropology. Saskatoon, SK. October.
- Chadwick, S., Amarra, S., Moffat, T. and **Wilson, W.** From knowledge to practice: infant feeding and vitamin D supplementation among Canadian-born and New Canadian mothers and children in Hamilton, Ontario and Calgary, Alberta. Paper presented at the 38<sup>th</sup> Annual Meeting of the Canadian Association for Physical Anthropology. Saskatoon, SK. October.

- Wilson, W. and Barr, E.K. A possible genetic contribution to linear growth faltering among Makushi children in Guyana. Paper presented at the 37<sup>th</sup> Annual Meeting of the Canadian Association for Physical Anthropology. Vancouver, BC. October.
- Wilson, W. and Bulkan, J. Sex differences in linear-growth faltering among the Makushi Amerindians of Guyana: female buffering or preferential treatment of daughters? Paper presented at the 33<sup>rd</sup> Annual Meeting of The Human Biology Association, Chicago, IL. April.
- Wilson, W. and Bulkan, J. Sex differences in linear-growth retardation among Makushi Amerindians: evidence for greater male environmental sensitivity? Paper presented at the 36<sup>th</sup> Annual Meeting of the Canadian Association for Physical Anthropology. Hamilton, ON. November.
- 2007 Palmer, P., **Wilson, W.** A Biocultural Approach to Understanding Growth Variation and Diet in Makushi Amerindian Children. Paper presented at the 35<sup>th</sup> Annual Meeting of the Canadian Association for Physical Anthropology. Banff, AB. November.
- Barr, E.K., **Wilson, W.** Growth among Makushi Amerindians and non-indigenous peoples in central Guyana: Possible evidence for a genetic explanation for variation in stature. Paper presented at the 31<sup>st</sup> Annual Meeting of The Human Biology Association, Philadelphia, PA. March.
- Palmer, P., **Wilson, W.** Diet and Growth of Makushi Amerindian Children in Guyana Paper presented at the 31<sup>st</sup> Annual Meeting of The Human Biology Association, Philadelphia, PA. March.
- Wilson, W., Milner, J., Bulkan, J. Duration of exclusive breastfeeding and its relationship to childhood mortality among the Makushi Amerindians of Guyana. Paper presented at the 75<sup>th</sup> Annual Meetings of the American Association of Physical Anthropologists. Anchorage, Alaska. March.
- 2005 Palmer, P. and **Wilson, W.** Diet and Growth of Makushi Amerindian Children in Neighboring Villages in Guyana. Invited paper to be presented at the 33<sup>rd</sup> Annual Meetings of the Canadian Association of Physical Anthropologists, Winnipeg, Manitoba. November.
- Wilson, W., Balkan, J. Anthropometric indices of nutritional status in Guyanese Makushi Amerindians. Paper presented at the 28<sup>th</sup> Annual Meeting of The Human Biology Association, Tampa, FL. April.
- Wilson, W., Forte, J., and Piperata, B. Birth order, growth, and maternal depletion among the Makushi. Paper presented at the Annual Meetings of the Canadian Association of Physical Anthropologists. Winnipeg, October.
- Wilson, W., Piperata, B., Forte, J. Birth Order and Growth Among Makushi Indians of Guyana. Poster presented at the 25<sup>th</sup> Annual Meeting of The Human Biology Association, Kansas City, KS. March.

- Wilson, W. and Dufour, D.L. The Tukanoans of Northwestern Amazonia and High-Cyanide Cassava (*Manihot esculenta* Crantz): A Lesson in Blackwater Basin Agriculture. Paper presented at the American Anthropological Association Annual Meeting, San Francisco, CA, November.
- Wilson, W. and Dufour, D.L. Selection for a toxic staple crop: meeting nutritional requirements in a blackwater basin of Northwest Amazonia. Paper presented at the 68<sup>th</sup> annual meeting of the American Association of Physical Anthropologists, Columbus, OH, April May.
- Wilson, W., Sander, J.B., and Dufour, D.L.. Accuracy of a short-term recall survey in the estimation of total energy expenditure. Poster presented at the 21<sup>st</sup> annual meeting of the Human Biology Association, Durham, NC, April.
- Dufour, D.L., Haught, T.A., and **Wilson W.** Rethinking laboratory based instruction in biological anthropology: human variation and microevolution." Poster presented at the 65<sup>th</sup> annual meeting of the American Association of Physical Anthropologists, Durham, NC, April.
- 1995 **Wilson, W.**, Staten, L.K., Dufour, D.L, Reina, J.C., and Spurr, G.B. Parasites, Nutritional Status and Work Capacity. Poster presented at the 14<sup>th</sup> annual Epidemiological Research Exchange, Department of Preventative Medicine and Biometrics, University of Colorado Health Sciences Center, Denver, CO, November.
- Wilson, W., Staten, L.K., Dufour, D.L., Barac-Nieto, M., Reina, J.C., Spurr, G.B. Parasitic infection and nutritional status in Colombian boys. Poster presented at the 20<sup>th</sup> annual meeting of the Human Biology Association, Oakland, CA, March.
- 1994 **Wilson, W.** and Dufour, D.L. Why use bitter manioc?: the Tatuyo rationale. Paper presented at the 93<sup>rd</sup> annual meeting of the American Anthropological Association, Atlanta, GA, November December.
- Wilson, W. and VanGerven, D.P. An analysis of the relationship between percent cortical area and other indicators of stress. Poster presented at the 63<sup>rd</sup> annual meeting of the American Association of Physical Anthropologists, Denver, CO, March April.
- Wilson, W., Dufour, D.L., Spurr, G.B., Reina, J.C., and Staten, L. The impact of parasitic infection on the nutritional status and work capacity of Colombian boys. Poster presented at the 92<sup>nd</sup> annual meeting of the American Anthropological Association, Washington, D.C., November.
- Wilson, W. and Dufour, D. L. Wild plant foods used by Indigenous peoples in Amazonia. Poster presented at the Third International Congress of Ethnobiology, Mexico City, November.
- 1991 **Wilson, W.** and Dufour, D.L. Characteristics of "wild" plant foods in Amazonia." Invited paper presented at the 90<sup>th</sup> annual meeting of the American Anthropological Association, Chicago, IL, November.

#### **Invited Lectures:**

- 2014 Wilson, W. Diet, stress, and health across cultures: The misadventures of an optimistic anthropologist. ARTS. November 2, 2014. San Diego, California. 2014 **Wilson, W.** Why should we invite anthropologists to the global health party? Case studies from Guyana and Tanzania. Global Health and International Partnerships/Institute for Public Health Weekly Global Health Seminar Series. March 5, 2014. University of Calgary. 2010 Wilson, W. Dietary intake among the Makushi Amerindians of Guyana. Child Nutrition and Health Lecture Series, Alberta Children's Hospital. September. 2010 Wilson, W. Makushi health: tough girls & unusual genes? Archaeology Department Lecture Series. September. 2008 Wilson, W. Assessing the impact of culture change on the well-being of a relatively isolated group of Guyanese Amerindians. Global Health Research Session, Department of Community Health Sciences. February. 2007 Wilson, W. Iwokrama National Park and the Makushi: Assessing the relationship. Iwokarma International Centre for Rainforest Conservation and Development, Georgetown, Guyana. Presentation for Guyana's Minister of Ameridian Affairs, Subminister of Eduation and Iwokrama's Field Staff. May. 2005 Wilson, W., Bulkan, J., Milner, J. Health in transition among swidden horticulturalists of Guyana: international recommendations and local realities. Noon Lecture Series,
- Wilson, W., Milner, J., Bulkan, J. Exclusive breastfeeding how long is too long?- An assessment of WHO recommendations among the Makushi Amerindians of Guyana. Health and Society Seminar. Department of Community Health Sciences. University of Calgary, April.

Department of Archaeology. November.

- Wilson, W. Human development and conservation in Guyana. University of Northern British Columbia's Lecture Series, November.
- Wilson, W. Why cultivate a poisonous food? Using pile-sort exercises to understand an agricultural practice of the Tukanoan Indians of Northwestern Amazonia. University of Calgary's Anthropology Stories from the Field Series, February.
- Wilson, W. Guyana beyond Jim Jones: an experiment in biological conservation and human development. University of Calgary, Department of Archaeology Lecture Series, October.
- 1997 **Wilson, W.** Mom, why do we always have to eat the poisonous plant for dinner?: lessons in agriculture from the Tukanoans of the Northwest Amazon. Department of Anthropology Brown Bag Series, University of Colorado-Boulder, February.

- Wilson, W. Is the bitter sweet?: lessons in agronomy from the Tukanoans. James G. Leyburn Scholars Program, Washington and Lee University, Lexington, VA, April.
- 1995 **Wilson, W.** Selection for a toxic staple crop among the Tukanoans of the Northwest Amazon. Anthropological Center for Training and Research on Global Environmental Change, Indiana University, Bloomington, February.

### Field Research:

2011	Tanzania: Collaboration with Drs. Benedikt Hallgrimsson (U. Calgary), Jason DeCaro (U. Alabama), Mange Manyama (Bugando U.), and Rich Spritz (U. Colorado) on two projects: (1) "FaceBase" to collect nutritional status data on ~2,000 children and (2) "Maternal Mental Health and Child Well-Being in Northwest Tanzania" to collect health outcome and predictors for 150 motherchild dyads.
2010	Calgary: Collaboration with Drs. Tina Moffat (McMaster U.), Dan Sellen (U. Toronto) and Esteban Parra (U. Toronto) on the project "From knowledge to practice: Vitamin D and new Canadian mothers and children." Conducted focus groups with female refugees in Calgary to explore their understanding of Vitamin D.
2009	Dominican Republic: Collaboration with Dr. John McLennan, University of Calgary's Faculty of Medicine to conduct field work to assess the nutritional status of Haitian immigrants in a slum on the periphery of Santo Domingo. July.
2000 – 2008	Guyana: Ongoing field research to evaluate the relationship between culture change and human well-being in Guyana's North Rupununi region.
1999	Guyana: Explored possible collaboration with the University of Guyana's School of Medicine, obtained research permits from the Guyanese government and Makushi Amerindians to research the impact of a new national park on the diet and health of the Makushi who live in and around the park. July – August.
1994 – 1995	Yapú and Cali, Colombia: Dissertation research in collaboration with the International Center for Tropical Agriculture on the agricultural practices of Tukanoan Indians and ground truthing remotely sensed (satellite) data. January – November 1994 and June – July 1995
1993	Cali, Colombia: Trained in analysis of pest and pathogen damage to manioc, measurement of manioc yields, and measurement of cyanogenic glucoside content of manioc tubers and refined dissertation research design at the International Center for Tropical Agriculture. October – November.
1992	Maraja Island and the Goeldi Museum, Belem, Brazil: Land use and subsistence systems of Caboclos. August.
1992	Cali, Colombia: research on parasitic infection and the nutritional status of

Colombian boys. July.

### Workshops:

2009 Vitamin D Network Workshop, University of Toronto Mississauga (Organizers: C

Moffat, McMaster University; E Parra, University of Toronto Mississauga; D Sellen, University of Toronto; **W Wilson**, University of Calgary) Sponsored by Social Sciences Research Council of Canada (SSHRC) and the University of Toronto, Mississauga:

Missisauga, ON: February 6.

2006 SSHRC Research Cluster: Children and Childhood in Human Societies. Shelley

Saunders, PI. Ottawa: September 8-9.

Workshop on Anthropological and Primate Genetics, American Association of

Anthropological Genetics, Southwest Foundation for Biomedical Research, San Antonio,

Texas: November.

### **Memberships in Professional Organizations:**

Human Biology Association Canadian Association for Physical Anthropology Calgary Institute for Population and Public Health Institute of Maternal and Child Health (University of Calgary) Child Health and Nutrition Group (University of Calgary)

# **Teaching:**

### **Graduate Courses**

ARKY 617 Theory and its Application in Biological Anthropology – Basic issues in the

study of human adaptation with a focus on principles of evolutionary biology as

they apply to modern studies. A bio-cultural approach is emphasized.

ARKY 603.94 **Tropical Forest Adaptations** –Covers tropical forest ecology, archaeology,

extant indigenous groups, and present conservation issues.

ARKY 603.86 **Human Adaptation to Environmental Stress** – Considers the principles of

evolutionary biology as they apply to modern studies of human adaptation with a focus on both biological and cultural adaptations to particular stressors including

high-altitude hypoxia, disease, and nutritional stress.

<u>Undergraduate Courses:</u> 1997 – present

ARKY 203 **Introduction to Physical Anthropology** – Survey of the major subfields of

physical anthropology including evolution, human paleoanthropology, genetics,

osteology, primatology, and techniques of data collection.

ARKY 305 **Human Variation and Adaptation** – Addresses some of the major problems

involved in interpreting modern and recent human diversity. Emphasis is placed

on the interaction between human cultural and biological systems.

ARKY 493 **Problems in Hominid Evolution** – A lecture and seminar course on the fossil

and biochemical evidence for hominid evolution.

ARKY 533.02 **Biological Anthropology Perspectives on Health** –This course provides a

critical consideration of work by biological anthropologists concerned with health among contemporary and past populations. The course begins with a general consideration of anthropology and anthropological perspectives on health and proceeds through cross-cultural studies of health and healing, dietary impacts on health, growth and development, reproductive health, aging, infectious disease, immune function, evolutionary medicine, and the impact of stress on physical and mental health. Students gain experience with several of the protocols used by biological anthropologists to document health outcomes and possible predictive

variables.

ARKY 589/ **Nutritional Anthropology** – A lecture and seminar course on study of human dietary practices from biological and cultural perspectives. Subjectives

human dietary practices from biological and cultural perspectives. Subjects covered include principles of nutrition; digestive kinetics; ecology; diet from an evolutionary, comparative and historic perspective; the impact of undernutrition

on human physiology and behaviour; and methods in nutritional anthropology.

ANTH 4270 **Biological Basis of Human Behavior** – a fourth year seminar course on

sociobiology, evolutionary psychology (taught at the University of Colorado,

Boulder)

ANTH 4150 **Human Ecology** – a fourth year course covering the interaction between human

physiology and the environment (taught at the University of Colorado in both

Denver and Boulder).

# **Graduate student supervision:**

#### PhD students:

Supervisor

Ashley Nagel (9/12 – present) Hygiene and the old-friends hypothesis among Tanzanian youth.

Gina Carroll (9/15– present) Iron-deficiency anemia among rural Nicaraguans

#### Committee Member

David Cooper (2000 – 2005) Age-Dependent Variation of the 3D Microstructure of Cortical

Bone Porosity: A Novel Means of Age-at-Death Estimation. (Dept. of

Archaeology)

Tania Saj (2000 – 2005) Ecological Influences on the Social Organization of *Colobus* 

vellerosus at Boabeng-Fiema, Ghana (Dept. of Anthropology)

Jocelyn Williams (2000 – 2005) Diet at Puruchuco-Huaquerones: Investigating society

and ecology using the stable isotopes of carbon and nitrogen in mummified

tissues from a central Peruvian cemetery (Dept. of Archaeology)

Andrea Waters (2008-2011) Health and Variation in Ancient Siberians: Enamel Hypoplasia and

Stable Nitrogen Isotope Analyses (Dept. of Archaeology)

Kate Faccia (2005-2011) Micro-CT to age human skeletal remains (Dept. of Archaeology)

Mange Mayama (4/10 – present) Craniofacial growth patterns in Tanzania: Patttern and 3D

assessment of children with orofacial clefts (Dept. of Cell Biology and Anatomy)

Examiner

Sandra Garvie-Lok (1/00 - 10/01) Diet and Health in the Byzantine/Ottoman Aegean Area. Graduated

June 2002.

Roman Harrison (8/00 - 11/00) Paleodiet studies using stable isotopes from bone apatite and

collagen. Graduated Nov. 2000.

MA students:

Supervisor

Natasha Hoehn (9/16-present) Maternal mental health and child allostatic load in rural Nicaragua.

Garielle Brown (9/14 - 5/17) Tropical enteropathy and growth among rural Nicaraguan children.

Patricia Palmer (9/06 - 5/09) Diet and health among the Makushi Indians of Guyana. Graduated

June 2009.

Erin Barr (9/05 - 6/08) The etiology of growth variation in Guyana's interior: the potential

role of genes. Graduated June. 2008.

Shawna Ardley (9/01 - 8/05) Seasonal variation in diet among the Makushi Indians of Guyana.

Graduated Nov. 2005.

Co-Supervisor

Amy Rudkoski (9/15-5/17) (With John McLennan, Research Chair in Child & Adolescent

Psychiatry Department of Psychiatry, University of Ottawa) Maternal mental

health and social capital among rural Nicaraguan mothers.

Chris Powell (9/09 - 9/12) (with Benedikt Hallgrimsson, Dept. Cell Biology and Anatomy)

Fetal adaptations (head-sparing) induced by maternal dietary practices of

Ngorongoro Maasai

C. Kate Curtis (9/08 - 8/13) (with M. Anne Katzenbergy, Dept. Archaeology) Growth and diet

of Haitian refugees in the Dominican Republic.

Karoline Guelke (9/01 - 2/04) (with Pascale Sicotte, Dept. Anthropology) Dietary practices in

Villaconte Valley of Peru

Committee Member

Andrea Waters (9/99 - 6/02) Stable isotope variation in growth and development. (Dept. of

Archaeology)

Kyle Knopff (9/02 - 6/04) Howler monkey interactions in Monkey River, Belize (Dept. of

Anthropology)

Mahnoush Rostami (8/10 - 8/12) Exploring changing patterns of weight classification among stunted

women in south Asia, 1996-2007. (Dept. of Community Health Sciences)

Examiner

Sarah Jazrawi (9/98 - 9/00) Postural Congruence in a captive group of chimpanzees (*Pan* 

Troglodytes). (Dept. of Anthropology)

Greg Bridgett (9/03-8/05) The Effects of Fruit Availability and Distribution on the Diet and

Ranging Behaviour of the Black Howler Monkeys (Alouatta pigra) of Monkey

River, Belize (Dept. of Anthropology)

Evelyn Tan (9/04-9/06) The nutritional quality of *Colobus vellerosus* diet at the Boabeng-

Fiema Monkey Sanctuary in Ghana (Dept. of Anthropology)

Stephen Wat (9/04-8/06) The Crf4 Mutation and the Developmental Basis for Variation in

Facial Length (Dept. of Cell Biology and Anatomy)

Yibo Sun (9/10) Groupware Places for Lightweight Meetings (Dept. of Computer Science)

#### Service:

2005 - 2008

### Faculty of Social Sciences / Arts

2003	2000	SSTIRE Subcommittee
2004 - 1	oresent	Director – Biological Anthropology Graduate Specialization

2003 – 2006 Representative to the Faculty of Kinesiology

SSHRC Subcommittee

2000 – 2012 Human Research Ethics Committee, Faculty of Social Sciences 2014 – present Human Research Ethics Committee, Faculty of Social Arts

### **Departmental Committees**

1999-2014 Graduate Admissions Committee

2000-2001 Curriculum Committee

2007-2008 Long-Term Planning Committee
2013-2014 Committee to merge the Anthropology and Archaeology Departments
2014 – present Undergraduate curriculum committee

# **Professional Organizations**

- 2007 Co-organizer of the 35<sup>th</sup> Annual meetings of the Canadian Association for Physical Anthropology, Banff, AB. 14-17 November.
- 2014 Local Chair, 39th Annual Meeting of The Human Biology Association, Calgary, 9-12 April.

# Language ability:

Spanish speaking, writing, and reading proficiency.